

HISTOGRAM Statement

The HISTOGRAM statement is used to either read only the values of one database field, or determine the number of records which meet a specified search criterion.

The HISTOGRAM statement does not provide access to any database fields other than the one specified in the HISTOGRAM statement.

The following topics are covered below:

- Syntax
- Limiting the Number of Values to be Read
- The STARTING/ENDING Clauses
- The WHERE Clause

Syntax

The basic syntax of the HISTOGRAM statement is:

HISTOGRAM VALUE IN *view* **FOR** *field*

or shorter:

HISTOGRAM *view field*

view is the name of a view defined in the DEFINE DATA statement (as explained earlier in this section). *field* is the name of the database field defined in that view.

For the complete syntax, refer to the HISTOGRAM statement documentation.

Limiting the Number of Values to be Read

In the same way as with the READ statement, you can limit the number of values to be read by specifying a number in parentheses after the keyword HISTOGRAM:

```
HISTOGRAM (6) MYVIEW FOR NAME
```

In the above example, only the first 6 values of the field NAME would be read.

Without the limit notation, all values would be read.

The STARTING/ENDING Clauses

Like the READ statement, the HISTOGRAM statement also provides a STARTING from clause and an ENDING AT (or THRU) clause to narrow down the range of values to be read by specifying a starting value and ending value.

Examples:

```
HISTOGRAM MYVIEW FOR NAME STARTING from 'BOUCHARD'  
HISTOGRAM MYVIEW FOR NAME STARTING from 'BOUCHARD' ENDING AT 'LANIER'  
HISTOGRAM MYVIEW FOR NAME from 'BLOOM' THRU 'ROESER'
```

The WHERE Clause

The HISTOGRAM statement also provides a WHERE clause which may be used to specify an additional selection criterion that is evaluated *after* a value has been read and *before* any processing is performed on the value. The field specified in the WHERE clause must be the same as in the main clause of the HISTOGRAM statement.

Example of HISTOGRAM Statement:

```

** Example Program 'HISTOX01'
  DEFINE DATA LOCAL
  1 MYVIEW VIEW OF EMPLOYEES
    2 CITY
  END-DEFINE
  *
  LIMIT 8
  HISTOGRAM MYVIEW CITY STARTING from 'M'
    DISPLAY NOTITLE CITY 'NUMBER OF/PERSONS' *NUMBER *COUNTER
  END-HISTOGRAM
END

```

CITY	NUMBER OF PERSONS	CNT
-----	-----	-----
MADISON	3	1
MADRID	41	2
MAILLY LE CAMP	1	3
MAMERS	1	4
MANSFIELD	4	5
MARSEILLE	2	6
MATLOCK	1	7
MELBOURNE	2	8

In the above program, the system variables *NUMBER and *COUNTER are also evaluated by the HISTOGRAM statement, and output with the DISPLAY statement. *NUMBER contains the number of database records that contain the last value read; *COUNTER contains the total number of values which have been read.